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NEWS	4	JUN	13	USPATFULL and USPAT2 updated with 11-character
				patent numbers for U.S. applications
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NEWS	7	JUN	30	AEROSPACE enhanced with more than 1 million U.S. patent records
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NEWS	17	AUG	15	CAOLD to be discontinued on December 31, 2008
NEWS	18	AUG	15	CAplus currency for Korean patents enhanced
NEWS	19	AUG	27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS	20	SEP	18	Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS	21	SEP	25	CA/CAplus current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances
NEWS	22	SEP	26	WPIDS, WPINDEX, and WPIX coverage of Chinese and and Korean patents enhanced
NEWS	2.3	SEP	29	IFICLS enhanced with new super search field
NEWS		SEP		EMBASE and EMBAL enhanced with new search and
112115		221		display fields
NEWS	25	SEP	30	CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents
NEWS	26	OCT	07	EPFULL enhanced with full implementation of EPC2000
NEWS		OCT		Multiple databases enhanced for more flexible patent number searching

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FULL ESTIMATED COST

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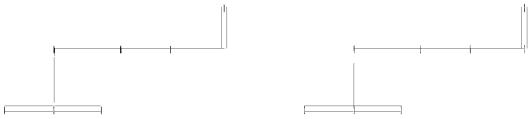
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chain nodes :
1 2 3 4 5 6 7 8
chain bonds :

1-3 1-2 1-4 4-5 5-6 6-7 7-8

exact/norm bonds :

1-3 1-2 1-4 4-5 5-6 6-7 7-8

Match level:

1:CLASS 2:CLASS 3:CLASS 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS

Generic attributes :

4:

Saturation : Saturated

Element Count : Node 4: Limited C,C5 N,N1

Node 5: Limited C,C1-3

L1 STRUCTURE UPLOADED

=> s 11 sss sam
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SAMPLE SCREEN SEARCH COMPLETED - 79768 TO ITERATE

2.5% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

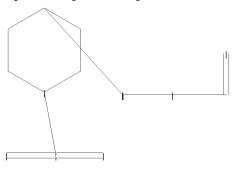
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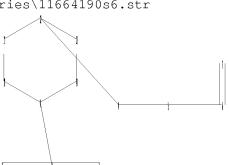
PROJECTED ANSWERS: 3141 TO 4835

L2 5 SEA SSS SAM L1

=>

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5 ANSWERS

chain nodes :
1 2 3 4 5 6 7

ring nodes :

9 10 11 12 13 14

chain bonds :

1-3 1-2 1-9 4-5 4-12 5-6 6-7

ring bonds :

9-10 9-14 10-11 11-12 12-13 13-14

exact/norm bonds :

 $1-3 \quad 1-2 \quad 1-9 \quad 4-5 \quad 4-12 \quad 5-6 \quad 6-7 \quad 9-10 \quad 9-14 \quad 10-11 \quad 11-12 \quad 12-13 \quad 13-14$

Match level:

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 9:Atom 10:CLASS

11:Atom 12:Atom 13:Atom 14:Atom

Element Count :
Node 4: Limited
 C,C1-3

L3 STRUCTURE UPLOADED

=> s 13 sss sam

SAMPLE SEARCH INITIATED 15:10:37 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 30692 TO ITERATE

6.5% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

PROJECTED ITERATIONS: 603361 TO 624319
PROJECTED ANSWERS: 1791 TO 3119

L4 8 SEA SSS SAM L3

=> d scan

L4 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Benzoic acid, 5-chloro-2-[[4-methyl-4-[[(2,2,2-

trifluoroacetyl)amino]methyl]-1-piperidinyl]sulfonyl]-, 1,1-dimethylethyl
ester

8 ANSWERS

MF C20 H26 C1 F3 N2 O5 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L4 8 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Benzamide, N-[[4-(4-fluorophenyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]-2-(methylthio)-

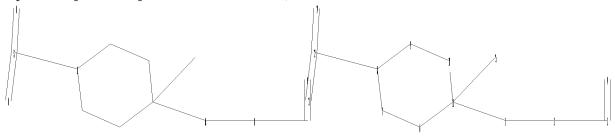
MF C23 H29 F N2 O3 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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chain nodes :

1 2 3 4 12 13 14 15

ring nodes :

6 7 8 9 10 11

chain bonds :

1-2 1-11 2-3 3-4 8-12 11-15 12-13 12-14

ring bonds :

6-7 6-11 7-8 8-9 9-10 10-11

exact/norm bonds :

 $1-2 \quad 1-11 \quad 2-3 \quad 3-4 \quad 6-7 \quad 6-11 \quad 7-8 \quad 8-9 \quad 8-12 \quad 9-10 \quad 10-11 \quad 12-13 \quad 12-14$

exact bonds :

11 - 15

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS

Element Count :

Node 1: Limited

L5 STRUCTURE UPLOADED

=> s 15 sss sam
SAMPLE SEARCH INITIATED 15:14:14 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 8688 TO ITERATE

23.0% PROCESSED 2000 ITERATIONS 2 ANSWERS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 168173 TO 179347
PROJECTED ANSWERS: 2 TO 349

L6 2 SEA SSS SAM L5

=> d scan

L6 2 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Benzamide, 2-bromo-N-[[1-(ethylsulfonyl)-4-[(tetrahydro-2-furanyl)methyl]-4-piperidinyl]methyl]-6-methyl-

MF C21 H31 Br N2 O4 S

$$\begin{array}{c|c} O & & & O \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 15 sss full FULL SEARCH INITIATED 15:15:01 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 172621 TO ITERATE 100.0% PROCESSED 172621 ITERATIONS 114 ANSWERS

SEARCH TIME: 00.00.03

L7 114 SEA SSS FUL L5

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
182.96
183.17

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FILE COVERS 1907 - 14 Oct 2008 VOL 149 ISS 16 FILE LAST UPDATED: 12 Oct 2008 (20081012/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

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=> s 17

L8 11 L7

=> d ibib abs hitstr 11

L8 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1956:12337 CAPLUS

DOCUMENT NUMBER: 50:12337

ORIGINAL REFERENCE NO.: 50:2581g-i,2582a-i

TITLE: Spiro-1'-benzenesulfonylpiperidine-4', 5-barbituric

acid and related derivatives of isonipecotic acid AUTHOR(S): Skinner, Glenn S.; Krysiak, Henry R.; Perregrino,

Tabab 7

Joseph A.

CORPORATE SOURCE: Univ. of Delaware, Newark

SOURCE: Journal of the American Chemical Society (1955), 77,

2248-50

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB A derivative of spiropiperidine-4',5-barbituric acid has been synthesized. The piperidine ring has the same effect as the cyclopentane ring in increasing both the ease of formation of the barbituric acid and the cleavage of the barbituric acid ring by aqueous alkali. Some isonipecotic acid derivs. have been prepared and subjected to pharmacol. examination Dry pyridine (630 g.) and 70 g. (HOCH2CH2)2NH treated dropwise with stirring

during 2 hrs. at $0-5^{\circ}$ with 388.5 g. PhSO2Cl, the mixture allowed to stand overnight, shaking with 500 g. finely crushed ice and 500 cc. HCl (d. 1.19), and filtered by suction, the filter residue washed with H2O and dried, and the dry crude product crystallized twice from CHCl3 yielded (PhSO3CH2CH2)2NSO2Ph (I), fine white monoclinic crystals, m. 128-9°. CH2(CO2Et)2 (128 g.) treated with 9.2 g. Na sand in 900 cc. dry C6H6, the mixture treated with 105 g. I, refluxed 20 hrs. on the steam bath, cooled, and neutralized with 2 cc. HCl (d. 1.19), the supernatant liquid decanted, the residue treated with 200 cc. cold H2O and extracted twice with C6H6, the C6H6 and CH2(CO2Et)2 removed in vacuo at 1 mm., the residue dissolved in 100 cc. hot EtOH, the solution cooled in ice-salt, the crystalline deposit filtered by suction and washed with 50% EtOH, and the product (125 g.) recrystd. from EtOH gave 120 g. pure di-Et 1-benzenesulfonylpiperidine-4,4-dicarboxylate (II), white crystals, m. 70° . II (18.4 g.) and 6.0 g. urea added with stirring at 40° to NaOEt from 3.44 g. Na and 60 cc. absolute EtOH, the mixture stirred 1 hr., kept 4 hrs. at 40° , allowed to stand overnight, and filtered, and the residue washed with EtOH and dried in vacuo over CaCl2 gave 18.6 g. Na salt (III) of spiro-1'-benzenesulfonylpiperidine-4',5barbituric acid (IV). The III added rapidly with stirring to ice and HCl, the precipitate filtered with suction, washed with cold, very dilute HCl, and

dried

and

in vacuo over KOH, and the product (15.7 g.) recrystd. from glacial AcOH gave IV, m. $278-80^{\circ}$ (decomposition). IV (3.37 g.) in a solution of 0.50 g. NaOH in 25 cc. H2O kept 2 hrs. at room temperature, and an aliquot acidified gave material, m. $125-30^{\circ}$ (decomposition), solidified and remelted at 195-200°; after 9 days the acid product sintered at 127-30° and melted at $203-6^{\circ}$; the remainder of the mixture acidified after 10days, and the precipitate recrystd. twice from EtOH gave the ureide (V) of isonipecotic acid (VI), clusters of needles, m. 205.5-206°, insol. in cold dilute aqueous NaOH. IV did not dissolve or change in appearance when boiled with 6N HCl. IV (1 g.) in 7.5 cc. 10% aqueous NaOH allowed to stand 1 hr., the solution treated 15 min. with gaseous CO2, filtered, and acidified to pH 3-4, and the oily precipitate allowed to stand overnight yielded $0.85~\mathrm{g}$. 1-benzenesulfonyl-4-carboxyisonipecotoylurea, colorless plates, decomposed at 128° (from Et20); it gave heated to 140° V. II (4 g.) refluxed 3 hrs. with 60 cc. 25% aqueous NaOH, the mixture acidified with cooling, and the precipitate recrystd. from H2O and EtOH gave 1-benzenesulfonylpiperidine-4,4-dicarboxylic acid (VII), crystals, decomposed at 124°. VII treated with SOC12 and then with NH4OH gave the diamide of VII, m. 223-4° (decomposition). V (0.3 q.) refluxed 2 hrs. with 15 cc. 20% aqueous NaOH and 2 cc. EtOH, the mixture acidified at 0° , and the fine precipitate washed with ice cold H2O yielded 87% 1-benzenesulfonylisonipecotic acid (VIII), m. $159-60^{\circ}$. VII heated at 170° until the CO2 evolution ceased, and the residue recrystd. from EtOH gave VIII, m. 160°. VIII (1 g.) refluxed 0.5 hr. at 60-5° with 1.3 g. SOC12, the excess SOC12 distilled off, the residue treated gradually with 1.4 g. NH4OH (0.90), and the white crystalline crude product recrystd. twice from 35 cc. EtOH washing each time with 50% EtOH yielded 0.92 g. amide of VIII, m. $206-6.5^{\circ}$. The acid chloride from 1.0 g. VIII treated with cooling with 1.0 g. MeOH, the mixture warmed with stirring to 70° , the solid dissolved with 2 cc. MeOH and filtered, the filtrate diluted gradually with ice cold H2O, the white granular precipitate

filtered and washed several times with H2O, and the crude product recrystd. from the min. amount MeOH gave 95% Me ester (IX) of VIII, m. 85°. The Et ester (X) of VIII, m. 82.5°, was prepared similarly in 85.5% yield. IX (15.18 g.) in 125 cc. MeOH added rapidly dropwise to 8 g. 95% N2H4 in 10 cc. refluxing MeOH, the solution refluxed 2 hrs., concentrated to 1/2 volume, allowed to stand, and filtered with suction,

the filter residue (14.0 g.) washed sparingly with MeOH and recrystd. from

100 cc. EtOH yielded 92% hydrazide of VIII, m. 134.5°; the yield obtained similarly from X was only 50%. The acid chloride from 3 g. VIII and 8.5 g. powdered urea heated 1 hr. gradually to 130°, the mixture cooled, the resulting cake treated with 50 cc. hot EtOH, the mixture cooled and filtered, the filter residue (3.0 g.) dissolved in 65 cc. hot EtOH and 17 cc. H2O and filtered, and the hot filtrate cooled in ice-salt deposited V, colorless fine needles. The amide of VIII gave 56% inhibition at 0.2 mq./cc. in the in vitro tuberculosis test, no hypnosis at 400-900 mq./kq. in rats, and 20% protection by the electro shock and no protection by the Metrazol method at 400 mg./kg. per os. The hydrazide at 0.2 mg./cc. gave 68% inhibition in the tuberculosis test. In mice it was ineffective against influenza virus, MM virus, Streptococcus pyogenes, typhoid, Klebsiella pneumoniae, and Pseudomonas aeruginosa. V at 0.2 mg./cc. gave no inhibition in the tuberculosis test, no hypnosis at 400-900 mg./kg. by mouth in rats, and 20% protection by the electro shock but no protection by the Metrazol method at 400 mg./kg. orally. IV by vein in rats produced convulsions, LD50 210 mg./kg.

RN 855636-16-7 CAPLUS

$$\begin{array}{c|c} O & O & \\ & \parallel \\ H_2N-C-NH-C & N & O \\ & HO_2C & \end{array}$$

=> d ibib abs hitstr 10

L8 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:713343 CAPLUS

DOCUMENT NUMBER: 135:272894

TITLE: Preparation of β -amino acid derivatives as

inhibitors of matrix metalloproteases and TNF- α

INVENTOR(S): Duan, Jingwu; King, Bryan W.; Decicco, Carl; Maduskuie, Thomas P., Jr.; Voss, Matthew E.

PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 483 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	KIND DATE				-	APPL	DATE									
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                                         US 2000-252062P
                                         WO 2001-US8336
                                                           W 20010315
```

OTHER SOURCE(S): MARPAT 135:272894

Novel β -amino acid derivs. A-CR3R4aCR2R4NR1CO-X-Z-Ua-Xa-Ya-Za [A = CO2H, SH, CH2SH, S(O)Ra:NH (Ra = H, alkyl), P(O)(OH)2, etc.; X, Xa is absent or alkylene, alkenylene or alkynylene; Z is absent or substituted C3-13 carbocycle or 5-14 membered heterocycle; Ua is absent or O, NRa1 [Ra1 = H, (un)substituted alkyl, alkenyl or alkynyl; Ra and Ra1 may form a ring], CO, CO2, O2C, CONRa1, S(0)p (p = 0-2), etc.; Ya is absent or O, NRa1, S(O)p or CO; Za is H, substituted C3-13 carbocycle or 5-14 membered heterocycle; R1 is H, alkyl, Ph, benzyl; R2 is Q (Q is H, substituted carbocycle or heterocycle), alkylene-Q, (CRaRa1)r10(CRaRa1)r-Q (r, r1 = $\frac{1}{2}$ 0-4), (CRaRa1)r1NRa(CRaRa1)r-Q, etc.; R3 = Q1 (Q1 is any group given for Q), alkylene-Q1, (CRaRa1)r10(CRaRa1)r-Q1, (CRaRa1)r1NRa(CRaRa1)r-Q1, etc.; R4, R4a = H, substituted alkyl, alkenyl or alkynyl; alternatively R1 and R2, R1 and R3, R3 and R4a may form rings (with provisos)] or a stereoisomer or pharmaceutically acceptable salt were prepared as metalloprotease and TNF- α inhibitors. Thus, N-hydroxy-1-[[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]acetyl]-3azetidinecarboxamide was prepared by a multistep procedure involving reactions of Me 4-hydroxyphenylacetate, 2-methyl-4-quinolinylmethanol, and 3-azetidinecarboxylic acid Me ester.

IT 362697-46-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of $\beta\text{-amino}$ acid derivs. as inhibitors of matrix metalloproteases and $\text{TNF-}\alpha)$

RN 362697-46-9 CAPLUS

CN 4-Piperidinecarboxamide, N-hydroxy-4-[[[4-[(2-methyl-4-quinolinyl)methoxy]benzoyl]amino]methyl]-1-(methylsulfonyl)- (CA INDEX NAME)

PAGE 2-A

IT 362703-42-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of $\beta\text{-amino}$ acid derivs. as inhibitors of matrix metalloproteases and $\text{TNF-}\alpha)$

RN 362703-42-2 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[[4-[(2-methyl-4-quinolinyl)methoxy]benzoyl]amino]methyl]-1-(methylsulfonyl)-, methyl ester (CA INDEX NAME)

PAGE 2-A

=> d ibib abs hitstr 9

L8 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:396851 CAPLUS

DOCUMENT NUMBER: 138:401607

TITLE: Preparation of piperidino cannabinoid receptor ligands

INVENTOR(S): Friary, Richard J.; Kozlowski, Joseph A.; Shankar, Bandarpalle B.; Wong, Michael K. C.; Zhou, Guowel;

Lavey, Brian J.; Shih, Neng-Yang; Tong, Ling; Chen,

Lei; Shu, Youheng

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

Ι	PAI	ENT :	NO.			KIND DATE			APPLICATION NO.							DATE			
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OTHER SOURCE(S): MARPAT 138:401607

AB Title compds. I [L1 = bond, CH2, CO, CO2, SO2, etc.; L2 = CH2, CH(alkyl), C(alkyl)2, etc.; L3 = bond, CO, SO2; R1 = H, halo, alkyl, haloalkyl, cycloalkyl, etc.; R2 = H, OH, halo, CF3, alkoxy, etc.; R3-4 = H, alkyl, taken together form a carbonyl group; R5 = H, alkyl; R6 = H, alkyl,

haloalkyl, cycloalkyl, amino, etc.; n=0-3] are prepared For instance, 4-(trifluoroacetamidomethyl)piperidine•TFA salt is reacted with p-chlorobenzenesulfonyl chloride (CH2Cl2, Et3N), the resulting sulfonamide functionalized ortho to the sulfonyl group (THF, n-BuLi, Boc2O), the trifluoroacetyl group removed (MeOH, K2CO3) and the amine refunctionalized with trifluoromethanesulfonic anhydride to give II. Compds. of the invention are found to exhibit cannabinoid CB2 receptor binding activity in the range of 0.1 to 1000 nM and possess anti-inflammatory and immunomodulatory activity.

IT 530115-22-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted piperidino cannabinoid receptor ligands for treatment of inflammatory disorders)

RN 530115-22-1 CAPLUS

CN Acetamide, N-[[1-[[4-chloro-2-[(2-fluorophenyl)sulfonyl]phenyl]sulfonyl]-4-methyl-4-piperidinyl]methyl]-2,2,2-trifluoro- (CA INDEX NAME)

IT 530115-99-2P 530116-00-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted piperidino cannabinoid receptor ligands for treatment of inflammatory disorders)

RN 530115-99-2 CAPLUS

CN Acetamide, N-[[1-[(4-chlorophenyl)sulfonyl]-4-methyl-4-piperidinyl]methyl]-2,2,2-trifluoro- (CA INDEX NAME)

RN 530116-00-8 CAPLUS

CN Benzoic acid, 5-chloro-2-[[4-methyl-4-[[(2,2,2-trifluoroacetyl)amino]methyl]-1-piperidinyl]sulfonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$F_3C-C-NH-CH_2 \qquad N-S \qquad C1 \\ Me \qquad 0 \qquad C-OBu-t \\ O$$

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L8 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:855758 CAPLUS

DOCUMENT NUMBER: 139:364829

TITLE: Preparation of heterocyclo inhibitors of potassium

channel function

INVENTOR(S): Lloyd, John; Jeon, Yoon T.; Finlay, Heather; Yan, Lin;

Beaudoin, Serge; Gross, Michael F.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Icagen, Inc.

SOURCE: PCT Int. Appl., 330 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA.	TENT	NO.			KIND DATE				APPLICATION NO.						DATE				
	WO 2003088908 WO 2003088908									WO 2	003-		20030416						
	W: AE, AG, AL,			AL,	AM.	AT,	AU,	AZ,	BA,	BB,	BG.	BR,	BY,	BZ.	CA,	CH.	CN.		
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		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	,		
JP	2005	5291	14		T		2005	0929	•	JP 2	003-	5856	61		2	0030	416		
NO	2004	0043	51		А		2004	1013		NO 2	004-	4351		20041013					
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										WO 2	003-1	JS11	807	Ī	W 2	0030	416		
HER SO	OURCE	(S):			MARI	PAT	139:	36483	29										

OTHER SOURCE(S): MARPAT 139:364829

GΙ

AB The title compds. [I; m, p = 0-3 (provided that the sum of m and p is at least 2); Q = NR1, O, S, SO, SO2; R1 = H, C(:W)NR6R7, SO2NR6R7, OCONR6R7, etc.; R2 = heteroaryl, heteroarylalkyl, aryl, etc.; J = a bond, alkylene; R3 = R5, OR5, SO2R5, etc.; R5 = CN, heteroaryl, aryl, etc.; R6, R7 = H, alkyl, OH, etc.; W = (un)substituted NH, N(CO2H), N(CN), N(SO2H), CH(NO2); Rx = H, alkyl, hydroxyalkyl, aryl, etc.], useful as inhibitors of potassium channel function (especially inhibitors of the Kv1 subfamily of voltage gated K+ channels, especially inhibitors Kv1.5 which has been linked to the ultra-rapidly activating delayed rectifier K+ current IKur) in the prevention and treatment of arrhythmia and IKur-associated conditions, were prepared E.g., a multi-step synthesis of II [starting from bis(2-chloroethyl)amine], was given. Pharmaceutical composition comprising the compound I is claimed.

IT 619291-04-2P 619291-05-3P 619291-06-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of substituted piperidines as inhibitors of potassium channel function)

RN 619291-04-2 CAPLUS

CN Benzamide, N-[[1-[[(4-fluorophenyl)methyl]amino]sulfonyl]-4- (phenylmethyl)-4-piperidinyl]methyl]-2-methoxy- (CA INDEX NAME)

RN 619291-05-3 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-[[(2-methoxyethyl)amino]sulfonyl]-4-(phenylmethyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 619291-06-4 CAPLUS

CN Benzamide, N-[[1-[(dimethylamino)sulfonyl]-4-(phenylmethyl)-4-

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ANSWER 7 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:310829 CAPLUS

140:303552 DOCUMENT NUMBER:

TITLE: Preparation of β -amino acid derivatives as

inhibitors of matrix metalloproteases and TNF- α

INVENTOR(S): Duan, Jingwu; King, Bryan W.; Decicco, Carl;

Maduskuie, Thomas P.; Voss, Mathew E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 150 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040072802	A1	20040415	US 2002-267207	20021009
PRIORITY APPLN. INFO.:			US 2002-267207	20021009

OTHER SOURCE(S): MARPAT 140:303552

Novel β -amino acid derivs. A-CR3R4aCR2R4NR1CO-X-Z-Ua-Xa-Ya-Za [A = CO2H, SH, CH2SH, S(O)Ra:NH (Ra = H, alkyl), P(O)(OH)2, etc.; X, Xa is absent or alkylene, alkenylene or alkynylene; Z is absent or substituted C3-13 carbocycle or 5-14 membered heterocycle; Ua is absent or O, NRa1 [Ra1 = H, (un)substituted alkyl, alkenyl or alkynyl; Ra and Ra1 may form a ring], CO, CO2, O2C, CONRa1, S(0)p(p = 0-2), etc.; Ya is absent or O, NRa1, S(O)p or CO; Za is H, substituted C3-13 carbocycle or 5-14 membered heterocycle; R1 is H, alkyl, Ph, benzyl; R2 is Q (Q is H, substituted carbocycle or heterocycle), alkylene-Q, (CRaRa1)r10(CRaRa1)r-Q (r, r1 = $\frac{1}{2}$ 0-4), (CRaRa1)r1NRa(CRaRa1)r-Q, etc.; R3 = Q1 (Q1 is any group given for Q), alkylene-Q1, (CRaRa1)r10(CRaRa1)r-Q1, (CRaRa1)r1NRa(CRaRa1)r-Q1, etc.; R4, R4a = H, substituted alkyl, alkenyl or alkynyl; alternatively R1 and R2, R1 and R3, R3 and R4a may form rings (with provisos)] or a stereoisomer or pharmaceutically acceptable salt were prepared as metalloprotease and TNF- α inhibitors. Thus, N-hydroxy-1-[[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]acetyl]-3azetidinecarboxamide was prepared by a multistep procedure involving reactions of Me 4-hydroxyphenylacetate, 2-methyl-4-quinolinylmethanol, and 3-azetidinecarboxylic acid Me ester.

362697-46-9P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of β -amino acid derivs. as inhibitors of matrix metalloproteases and $TNF-\alpha$)

RN 362697-46-9 CAPLUS

CN 4-Piperidinecarboxamide, N-hydroxy-4-[[[4-[(2-methyl-4-quinolinyl)methoxy]benzoyl]amino]methyl]-1-(methylsulfonyl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

IT 362703-42-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of $\beta\text{-amino}$ acid derivs. as inhibitors of matrix metalloproteases and $\text{TNF-}\alpha)$

RN 362703-42-2 CAPLUS

CN 4-Piperidinecarboxylic acid, 4-[[[4-[(2-methyl-4-quinolinyl)methoxy]benzoyl]amino]methyl]-1-(methylsulfonyl)-, methyl ester (CA INDEX NAME)

PAGE 2-A

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L8 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1220538 CAPLUS

DOCUMENT NUMBER: 143:472603

TITLE: Morpholinyl piperidine derivative glycine transporter

GlyT1 inhibitors, their preparation/., and their use

for treatment of neurological and psychiatric

disorders

INVENTOR(S): Lindsley, Craig W.; Wolkenberg, Scott E.; Zhao,

Zhijian

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						D	DATE		APPLICATION NO.						DATE		
		2005107469						20051117		WO 2005-US15134								
			-			_		AU,		BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
			NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,
			SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,
			ZM,	ZW														
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
			MR,	NE,	SN,	TD,	TG											
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											WO 2						0050	429
OTHE	OTHER SOURCE(S):																	

OTHER SOURCE(S): MARPAT 143:472603

RN

AB The invention discloses morpholinyl piperidine compds. that inhibit the glycine transporter GlyT1 and which are useful in the treatment of neurol. and psychiatric disorders associated with glycinergic or glutamatergic neurotransmission dysfunction and diseases in which the glycine transporter GlyT1 is involved. Preparation of I is described.

Ι

IT 869463-15-0P 869463-16-1P 869463-17-2P 869463-18-3P 869463-19-4P 869463-20-7P 869463-21-8P 869463-22-9P 869463-23-0P 869463-24-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(morpholinyl piperidine derivative glycine transporter GlyT1 inhibitor preparation and use for treatment of neurol. and psychiatric disorders) 869463-15-0 CAPLUS

CN Benzamide, 2,4-dichloro-N-[[4-(4-morpholinylcarbonyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-16-1 CAPLUS

CN Benzamide, 2-chloro-N-[[4-(4-morpholinylcarbonyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-17-2 CAPLUS

CN Benzamide, 2,4-dichloro-N-[[1-(ethylsulfonyl)-4-(4-morpholinylcarbonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN

869463-18-3 CAPLUS Benzamide, 2,4-dichloro-N-[[1-[(1-methylethyl)sulfonyl]-4-(4- $^{\prime}$ CN morpholinylcarbonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-19-4 CAPLUS

Urea, N-[2,4-bis(trifluoromethyl)phenyl]-N'-[[4-(4-morpholinylcarbonyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)CN

RN 869463-20-7 CAPLUS

CN Urea, N-(5-bromo-2-thiazolyl)-N'-[[4-(4-morpholinylcarbonyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-21-8 CAPLUS

CN Urea, N-1,3-benzodioxol-5-yl-N'-[[4-(4-morpholinylcarbonyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-22-9 CAPLUS

CN Urea, N-ethyl-N'-[[4-(4-morpholinylcarbonyl)-1-(propylsulfonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-23-0 CAPLUS

CN Benzamide, 2,4-dichloro-N-[[1-(cyclopropylsulfonyl)-4-(4-morpholinylcarbonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 869463-24-1 CAPLUS

CN Benzamide, 2,4-dichloro-N-[[1-(ethylsulfonyl)-4-(4-morpholinylcarbonyl)-4-piperidinyl]methyl]-5-fluoro- (CA INDEX NAME)

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COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 36.54 219.71 SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -4.80 -4.80

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